

APPENDIX 4-A

STORAGE OF QUININE AND QUINIDINE SULFATE

1. *Description.* Quinine and quinidine sulfate is received for storage in the form of a white crystalline powder produced from cinchore bark. When acquired, quinine sulfate shall meet Purchase Specification P-46-R (Current Edition); Quinidine sulfate shall meet Purchase Specification P-45-R. (Current Edition). Material was normally received in rectangular tin cans containing 100 or 250 ounces each, packed 4 or 10 cans in steel-strapped wooden boxes. Each box normally measure 20" x 19" x 15" with a net weight of 1,000 ounces. In addition, there is presently in storage Quinine packed in fiberboard drums, approximately 29 inches high and 20 inches in diameter, containing 1,000 ounces each.
2. *Packaging.* For new receipts, 1,000 av. oz. of Quinine shall be packed in double polyethylene bags inserted into 30-gallon, 16-gauge steel drums painted or hotdipped galvanized after fabrication conforming to the requirements of National Stockpile Container Specification C-1 (latest revision). Quinidine shall be packaged to the above requirements except that 1,763 av. oz. (50 kg) shall be packaged into a 35 gallon drum.
3. *Marking.* Drums are to be identified with three metal tags. One tag attached to the outside of the lid, one on the inside of the lid, and one attached to the drum side. Information on the tags will be as instructed on the purchase contract and specification.
4. *Storage.* Material in painted drums shall be stored in a warehouse so as to protect drums from the weather.
5. *Precautions To Be Taken*
 - a. *Health.* Packaged quinine and quinidine is not considered a health hazard, but care must be exercised in cleaning up spills in case of breakage. The dust created may be irritating to the nasal passages or cause skin rash on some people. Persons hypersensitive to quinidine or quinine who breathe in excessive amounts of dust could suffer from cinchonism or idiosyncrasy. Excessive inhalation amounts of quinidine could cause ventricular arrhythmia. Respiratory protection and gloves should be worn by persons exposed to such dust. If subjected to fire, quinidine releases toxic fumes (Oxides of Nitrogen) .
 - b. *General.* Boxes containing quinidine must be handled with care to prevent damage. Boxes must be kept dry. Rusting of tin cans contaminate the material. Quinidine contaminated clean up materials such as brooms, rags, clothing, gloves, etc., are to be disposed of through ordinary landfill.
6. *Average Storage Factor.* 60 gross square feet per short ton.

FOR ADDITIONAL INFORMATION ON THIS COMMODITY REFER TO THE MATERIAL SAFETY DATA SHEET OR THE MOST RECENT PURCHASE SPECIFICATION.